| Project Title  | Funding  | Institution                                    |  |
|--|----------|--|--|
| Investigation of cortical folding complexity in children with autism, their autism-discordant siblings, and controls | \$0      | Stanford University                            |  |
| Characterization of the pathological and biochemical markers that correlate to the clinical features of autism       | \$0      | Research Foundation for Mental Hygiene, Inc.   |  |
| Stereological analyses of neuron numbers in frontal cortex from age 3 years to adulthood in autism                   | \$0      | University of California, San Diego            |  |
| Psychophysiological mechanisms of emotion expression   | \$0      | Georgia State University                       |  |
| Are neuronal defects in the cerebral cortex linked to autism?  | \$0      | Memorial Sloan-Kettering Cancer Center         |  |
| Optical analysis of circuit-level sensory processing in the cerebellum   | \$0      | Princeton University                           |  |
| Characterization of the pathological and biochemical markers that correlate to the clinical features of autism       | \$0      | Research Foundation for Mental Hygiene, Inc.   |  |
| Characterization of the pathological and biochemical markers that correlate to the clinical features of autism       | \$0      | Research Foundation for Mental Hygiene, Inc.   |  |
| Informational and neural bases of empathic accuracy in autism spectrum disorder                                      | \$0      | Columbia University                            |  |
| BDNF secretion and neural precursor migration  | \$0      | Dana-Farber Cancer Institute                   |  |
| ACE Center: Diffusion tensor MRI + histopathology of brain microstructure + fiber pathways (supplement)              | \$2      | University of Pittsburgh                       |  |
| ACE Center: Diffusion tensor MRI + histopathology of brain microstructure + fiber pathways                           | \$12     | University of Pittsburgh                       |  |
| fMRI study of self-produced tactile stimulation in autistic adolescents  | \$244    | Mount Sinai School of Medicine                 |  |
| Neural mechanisms of attentional networks in autism  | \$490    | Mount Sinai School of Medicine                 |  |
| Greater New York Autism Center of Excellence - Clinical Core   | \$1,224  | Mount Sinai School of Medicine                 |  |
| Characterization of the mirror neuron system in 3-9 month old infants using the BabySQUID imaging system             | \$4,748  | University of New Mexico                       |  |
| Functional neuroanatomy of developmental changes in face processing (supplement)                                     | \$7,712  | University of Kentucky                         |  |
| MRI studies of cognition and sensorimotor integration  | \$7,770  | Georgetown University                          |  |
| Neurobiological correlates of language dysfunction in autism spectrum disorders (supplement)                         | \$8,688  | Alexian Brothers Medical Center                |  |
| Structural brain differences between autistic and typically-developing siblings                                      | \$12,030 | Stanford University                            |  |
| Presence of clostridia in children with and without ASD  | \$12,054 | Center for Autism and Related Disorders (CARD) |  |
| A model-based investigation of face processing in autism   | \$12,950 | Georgetown University                          |  |
| Wiring the brain: From genetic to neuronal networks  | \$13,000 | University of North Carolina at Chapel Hill    |  |
| Description and assessment of sensory abnormalities in ASD   | \$18,968 | Center for Autism and Related Disorders (CARD) |  |
| A microdevice for immune profiling of children with autism   | \$19,000 | University of California, Davis                |  |
| Real time PCR for yeasts   | \$20,000 | Brentwood Biomedical Research, Inc.            |  |
| Restricted and repetitive behaviors in young children with autism (supplement)                                       | \$23,131 | Duke University                                |  |
| Psychophysiological approaches to the study of autism  | \$26,000 | University of Washington                       |  |

| Project Title   | Funding  | Institution                                    |  |
|---|----------|--|--|
| Longitudinal neurodevelopment of auditory and language cortex in autism   | \$27,318 | University of Utah                             |  |
| Evaluation of sleep disturbance in children with ASD  | \$27,456 | Center for Autism and Related Disorders (CARD) |  |
| Neurobiological mechanisms of insistence on sameness in autism  | \$28,000 | University of Illinois at Chicago              |  |
| Visual perspective-taking and the acquisition of American Sign Language by deaf children with autism                            | \$28,000 | University of Texas at Austin                  |  |
| MEG investigation of phonological processing in autism  | \$28,000 | University of Colorado Denver                  |  |
| Neural mechanisms underlying an extended multisensory temporal binding window in ASD  | \$28,000 | Vanderbilt University                          |  |
| Neural basis of socially driven attention in children with autism   | \$28,000 | University of California, Los Angeles          |  |
| Linguistic perspective-taking in adults with high-functioning autism: Investigation of the mirror neuron system                 | \$28,000 | Carnegie Mellon University                     |  |
| Roles of Wnt signaling/scaffolding molecules in autism  | \$28,000 | University of California, San Francisco        |  |
| Neural basis of audiovisual integration during language comprehension in autism   | \$30,000 | University of Rochester                        |  |
| Visuospatial processing in adults and children with autism  | \$30,000 | Carnegie Mellon University                     |  |
| Neural mechanisms of social cognition and bonding   | \$31,387 | Emory University                               |  |
| Mimicry and imitation in autism spectrum disorders  | \$31,685 | University of Connecticut                      |  |
| Understanding perception and action in autism   | \$32,000 | Kennedy Krieger Institute                      |  |
| Phonological processing in the autism spectrum  | \$32,000 | Heriot-Watt University                         |  |
| Molecular mechanisms regulating synaptic strength (supplement)  | \$32,258 | Washington University in St. Louis             |  |
| ACE Center: Disturbances of affective contact: Development of brain mechanisms for emotion (supplement)                         | \$32,703 | University of Pittsburgh                       |  |
| Multisensory integration and temporal synchrony in autism   | \$34,176 | University of Rochester                        |  |
| Distinct function of the neuroligin 3 postsynaptic adhesion complex   | \$37,784 | Columbia University                            |  |
| Regulation of activity-dependent ProSAP2 synaptic dynamics  | \$41,176 | Stanford University                            |  |
| fMRI studies of cerebellar functioning in autism  | \$46,000 | University of Illinois at Chicago              |  |
| Deriving neuroprogenitor cells from peripheral blood of individuals with autism   | \$46,597 | University of Utah                             |  |
| Neural substrate of language and social cognition: Autism and typical development   | \$47,210 | Massachusetts Institute of Technology          |  |
| Imaging synaptic neurexin-neuroligin complexes by proximity biotinylation: Applications to the molecular pathogenesis of autism | \$49,000 | Massachusetts Institute of Technology          |  |
| ACE Center: Mirror neuron and reward circuitry in autism (supplement)   | \$51,364 | University of California, Los Angeles          |  |
| Slick and slack heteromers in neuronal excitability   | \$53,354 | Yale University                                |  |
| Architecture of myelinated axons linking frontal cortical areas   | \$54,000 | Boston University                              |  |
| The neural substrates of repetitive behaviors in autism   | \$54,436 | Boston University Medical Campus               |  |

| ACE Center: The Imaging Core (supplement)  Analysis of brain microstructure in autism using novel diffusion MRI spaproaches  Cortical mechanisms underlying visual motion processing impairments in autism  Attentional abnormalities in autism: An electrophysiological study of the basal forebrain and central nucleus of the amygdala  The neural correlates of transient and sustained executive control in children with autism spectrum disorder  Neuroligins and neurexins as autism candidate genes: Study of their association in synaptic connectivity  Using genetically modified mice to explore the neuronal network involved in social recognition  Electrical measures of functional cortical connectivity in autism  \$60,00  Past, present, and future-oriented thinking about the self in children with autism spectrum disorder | ,992<br>,000<br>,000<br>,000<br>,000<br>,000 | University of California, Los Angeles  Washington University School of Medicine  Harvard Medical School/McLean Hospital  University of California, San Diego  University of Missouri  University of California, San Diego  Haifa University  University of Washington |  |
|---|--|---|--|
| approaches  Cortical mechanisms underlying visual motion processing impairments in autism  Attentional abnormalities in autism: An electrophysiological study of the basal forebrain and central nucleus of the amygdala  The neural correlates of transient and sustained executive control in children \$60,00 with autism spectrum disorder  Neuroligins and neurexins as autism candidate genes: Study of their association in synaptic connectivity  Using genetically modified mice to explore the neuronal network involved in social recognition  Electrical measures of functional cortical connectivity in autism  \$60,00  Past, present, and future-oriented thinking about the self in children with   | ,000<br>,000<br>,000<br>,000<br>,000         | Harvard Medical School/McLean Hospital  University of California, San Diego  University of Missouri  University of California, San Diego  Haifa University  University of Washington  |  |
| autism  Attentional abnormalities in autism: An electrophysiological study of the basal forebrain and central nucleus of the amygdala  The neural correlates of transient and sustained executive control in children \$60,00 with autism spectrum disorder  Neuroligins and neurexins as autism candidate genes: Study of their association in synaptic connectivity  Using genetically modified mice to explore the neuronal network involved in social recognition  Electrical measures of functional cortical connectivity in autism  \$60,00  Past, present, and future-oriented thinking about the self in children with  | ,000<br>,000<br>,000<br>,000                 | University of California, San Diego University of Missouri University of California, San Diego Haifa University University of Washington  |  |
| basal forebrain and central nucleus of the amygdala  The neural correlates of transient and sustained executive control in children \$60,00 with autism spectrum disorder  Neuroligins and neurexins as autism candidate genes: Study of their association in synaptic connectivity  Using genetically modified mice to explore the neuronal network involved in social recognition  Electrical measures of functional cortical connectivity in autism  \$60,00  Past, present, and future-oriented thinking about the self in children with  | ,000<br>,000<br>,000                         | University of Missouri University of California, San Diego Haifa University University of Washington  |  |
| with autism spectrum disorder  Neuroligins and neurexins as autism candidate genes: Study of their association in synaptic connectivity  Using genetically modified mice to explore the neuronal network involved in social recognition  Electrical measures of functional cortical connectivity in autism  \$60,00  Past, present, and future-oriented thinking about the self in children with  | ,000   | University of California, San Diego  Haifa University  University of Washington   |  |
| association in synaptic connectivity  Using genetically modified mice to explore the neuronal network involved in social recognition  Electrical measures of functional cortical connectivity in autism  \$60,00  Past, present, and future-oriented thinking about the self in children with   | ,000   | Haifa University University of Washington   |  |
| social recognition  Electrical measures of functional cortical connectivity in autism  \$60,00  Past, present, and future-oriented thinking about the self in children with  \$61,00  | ,000   | University of Washington  |  |
| Past, present, and future-oriented thinking about the self in children with \$61,00   | ,  | · · · · · · · · · · · · · · · · · · ·   |  |
|   | ,000,  | i   |  |
| additin oposition disorder  |  | City University London  |  |
| GABAergic dysfunction in autism (supplement) \$63,95  | ,950   | University of Minnesota   |  |
| Neocortical regionalization: Analysis of genetic and epigenetic influences \$75,00  | ,000   | University of California, Riverside   |  |
| Physiological and behavioral characterization of sensory dysfunction in \$77,25 autism  | ,,250  | Thomas Jefferson University   |  |
| Gamma band dysfunction as a local neuronal connectivity endophenotype in \$78,79 autism   | ,797   | University of Colorado Denver   |  |
| Cortical complexity in children with autism, unaffected siblings, and controls \$79,00  | ,000   | Stanford University   |  |
| Precursors of theory of mind in young children with autism \$79,22  | ,227   | Carnegie Mellon University  |  |
| Neural basis for the production and perception of prosody \$81,50   | ,500   | University of Southern California   |  |
| ACE Center: Development of categorization, facial knowledge in low & high functioning autism (supplement) \$81,81   | ,816   | University of Pittsburgh  |  |
| Autistic endophenotypes and their associations to oxytocin and cholesterol \$84,05  | ,055   | Mount Sinai School of Medicine  |  |
| Coherence and temporal dynamics in auditory cortex of children with autism \$88,29  | ,292   | Massachusetts General Hospital  |  |
| Time perception and timed performance in autism \$89,87   | ,871   | Kennedy Krieger Institute   |  |
| Social behavior deficits in autism: Role of amygdala \$93,50  | ,500   | State University of New York Upstate Medical Center   |  |
| ACE Center: Systems connectivity + brain activation: Imaging studies of language + perception (supplement) \$94,02  | ,022   | University of Pittsburgh  |  |
| Multisensory processing in autism \$104,6   | 4,607  | University of North Carolina at Chapel Hill   |  |
| Anatomy of primate amygdaloid complex \$106,6   | 6,669  | University of California, Davis   |  |
| Engrailed and the control of synaptic circuitry in Drosophila \$112,5   | 2,500  | University of Puerto Rico Medical Sciences Campus   |  |
| MEG investigation of the neural substrates underlying visual perception in autism \$127,0   | 7,081  | Massachusetts General Hospital  |  |

| Project Title  | Funding   | Institution                                 |  |
|--|-----------|---|--|
| Behavioral and functional neuroimaging investigations of visual perception and cognition in autistics                            | \$127,168 | Université de Montréal                      |  |
| Role of Pam in synaptic morphology and function  | \$127,497 | Massachusetts General Hospital              |  |
| A combined fMRI-TMS study on the role of the mirror neuron system in social cognition: Moving beyond correlational evidence      | \$127,500 | University of California, Los Angeles       |  |
| The effects of Npas4 and Sema4D on inhibitory synapse formation  | \$127,500 | Children's Hospital Boston                  |  |
| NrCAM, a candidate susceptibility gene for visual processing deficits in autism  | \$127,500 | University of North Carolina at Chapel Hill |  |
| Novel approaches for investigating the neurology of autism: Detailed morphometric analysis and correlation with motor impairment | \$127,500 | Kennedy Krieger Institute                   |  |
| Role of neuroligin in synapse stability  | \$127,500 | Oklahoma Medical Research Foundation        |  |
| Analysis of the small intestinal microbiome of children with autism  | \$132,750 | Massachusetts General Hospital              |  |
| The role of Fox-1 in neurodevelopment and autistic spectrum disorder   | \$139,471 | University of California, Los Angeles       |  |
| Dendritic organization within the cerebral cortex in autism  | \$144,822 | The Open University                         |  |
| Cognitive control in autism  | \$146,960 | University of California, Davis             |  |
| Neural correlates of social exchange and valuation in autism   | \$149,985 | Baylor College of Medicine                  |  |
| Testing the effects of cortical disconnection in non-human primates  | \$150,000 | The Salk Institute for Biological Studies   |  |
| Behavioral and sensory evaluation of auditory discrimination in autism   | \$150,220 | University of Massachusetts Medical School  |  |
| Taste, smell, and feeding behavior in autism: A quantitative traits study (supplement)   | \$151,884 | University of Rochester                     |  |
| The role of the amygdala in autism   | \$152,144 | University of California, Davis             |  |
| Social and affective components of communication   | \$152,186 | The Salk Institute for Biological Studies   |  |
| ACE Center: Disturbances of affective contact: Development of brain mechanisms for emotion                                       | \$154,445 | University of Pittsburgh                    |  |
| Optogenetic analysis of circuits for vocal recognition   | \$156,000 | Duke University                             |  |
| Multimodal brain imaging in autism spectrum disorders  | \$165,397 | University of Washington                    |  |
| Murine genetic models of autism  | \$172,390 | Vanderbilt University                       |  |
| Reward system in autism  | \$181,125 | Kennedy Krieger Institute                   |  |
| The mirror neuron system in the monkey and its role in action understanding  | \$184,470 | Massachusetts General Hospital              |  |
| Brain circuitry in simplex autism  | \$187,500 | Washington University in St. Louis          |  |
| Neurobiology of affective prosody perception in autism   | \$190,000 | Washington University in St. Louis          |  |
| Anterior cingulate and fronto-insular related brain networks in autism   | \$194,745 | Mount Sinai School of Medicine              |  |
| Behavioral pilot for an imaging study of social attention deficits in autism   | \$205,200 | Washington University in St. Louis          |  |
| ACE Center: Imaging the autistic brain before it knows it has autism   | \$206,916 | University of California, San Diego         |  |
| MRI measures of neural connectivity in Asperger's disorder   | \$208,337 | University of Michigan                      |  |
| Neural mechanisms for social cognition in autism spectrum disorders  | \$229,730 | Massachusetts Institute of Technology       |  |

| Project Title   | Funding   | Institution   |  |
|---|-----------|---|--|
| e development of object representation in infancy   | \$248,095 | Regents of University of California                         |  |
| Autism spectrum disorders and the visual analysis of human motion                           | \$250,000 | Rutgers, The State University of New Jersey                 |  |
| Cerebellar anatomic and functional connectivity in autism spectrum disorders                | \$251,419 | University of Texas at Austin                               |  |
| High-resolution diffusion tensor imaging in mouse models relevant to autism                 | \$253,735 | University of Pennsylvania                                  |  |
| Connectivity of anterior cingulate cortex networks in autism                                | \$265,044 | New York University School of Medicine                      |  |
| maging brain and movement in ASD  | \$270,296 | University of California, San Diego                         |  |
| Gross morphological correlates to the minicolumnopathy of autism                            | \$287,554 | University of Louisville                                    |  |
| Chemosensory processing in chemical communication   | \$287,963 | Florida State University                                    |  |
| GABAergic dysfunction in autism   | \$294,344 | University of Minnesota                                     |  |
| Molecular mechanisms regulating synaptic strength   | \$299,250 | Washington University in St. Louis                          |  |
| Functional neuroanatomy of developmental changes in face processing                         | \$302,360 | University of Kentucky                                      |  |
| Motivation, self-monitoring, and family process in autism                                   | \$304,247 | University of Miami   |  |
| ACE Center: Mirror neuron and reward circuitry in autism                                    | \$307,838 | University of California, Los Angeles                       |  |
| The fusiform and amygdala in the pathobiology of autism                                     | \$311,951 | Children's Hospital of Philadelphia                         |  |
| Development of brain connectivity in autism   | \$312,916 | New York School of Medicine                                 |  |
| Testing neurological models of autism   | \$315,526 | California Institute of Technology                          |  |
| The neural basis of social cognition  | \$325,651 | Indiana University  |  |
| ACE Center: The Imaging Core  | \$326,381 | University of California, Los Angeles                       |  |
| Motor skill learning in autism  | \$332,646 | Kennedy Krieger Institute                                   |  |
| Multisensory integration of faces and voices in the primate temporal lobe                   | \$335,983 | Princeton University  |  |
| ACE Center: Neuroimaging studies of connectivity in ASD                                     | \$337,540 | Yale University   |  |
| Cerebellar modulation of frontal cortical function  | \$347,643 | University of Memphis                                       |  |
| The microstructural basis of abnormal connectivity in autism                                | \$348,980 | University of Utah  |  |
| ACE Center: Cognitive affective and neurochemical processes underlying IS in autism         | \$377,577 | University of Illinois at Chicago                           |  |
| The development and redevelopment of lexical and sublexical representations                 | \$380,273 | The Research Foundation of the State University of New York |  |
| Towards an endophenotype for amygdala dysfunction   | \$384,145 | California Institute of Technology                          |  |
| ACE Center: Development of categorization, facial knowledge in low & high unctioning autism | \$386,379 | University of Pittsburgh                                    |  |
| inking local activity and functional connectivity in autism                                 | \$388,825 | San Diego State University                                  |  |
| maging signal transduction in single dendritic spines                                       | \$390,000 | Duke University   |  |
| Morphogenesis and function of the cerebral cortex   | \$399,013 | Yale University   |  |

| Project Title   | Funding     | Institution                            |  |
|---|-------------|--|--|
| Neuroimaging of top-down control and bottom-up processes in childhood ASD                     | \$403,739   | Georgetown University                  |  |
| Neurobiological correlates of language dysfunction in autism spectrum disorders               | \$404,389   | Alexian Brothers Medical Center        |  |
| ACE Center: Systems connectivity + brain activation: Imaging studies of language + perception | \$444,021   | University of Pittsburgh               |  |
| Integrative functions of the planum temporale   | \$452,524   | University of California, Irvine       |  |
| Engrailed genes and cerebellum morphology, spatial gene expression and circuitry              | \$474,750   | Memorial Sloan-Kettering Cancer Center |  |
| Upgrade to multiuser 3T magnetic resonance imager   | \$500,000   | University of Kentucky                 |  |
| Radiofrequency transmit and receive upgrade for 3T research scanner                           | \$500,000   | Kennedy Krieger Institute              |  |
| Atypical late neurodevelopment in autism: A longitudinal MRI and DTI study                    | \$503,378   | University of Utah                     |  |
| Development of the functional neural systems for face expertise                               | \$524,017   | University of California, San Diego    |  |
| RNA-Seq studies of gene expression in cells and networks in FI and ACC in autism              | \$564,301   | California Institute of Technology     |  |
| Function and structure adaptations in forebrain development                                   | \$568,834   | University of Southern California      |  |
| Role of autism-susceptibility gene, CNTNAP2, in neural circuitry for vocal communication      | \$573,420   | University of California, Los Angeles  |  |
| Taste, smell, and feeding behavior in autism: A quantitative traits study                     | \$592,498   | University of Rochester                |  |
| Sensory processing and integration in autism  | \$593,677   | City College of New York               |  |
| Neurodevelopmental mechanisms of social behavior  | \$607,379   | University of Southern California      |  |
| fMRI studies of neural dysfunction in autistic toddlers                                       | \$614,468   | University of California, San Diego    |  |
| Identifying brain-based biomarkers for ASD & their biological subtypes                        | \$1,206,925 | New York State Psychiatric Institute   |  |
| The cognitive neuroscience of autism spectrum disorders                                       | \$1,335,493 | National Institutes of Health (NIH)    |  |
| Functional anatomy of face processing in the primate brain                                    | \$1,678,309 | National Institutes of Health (NIH)    |  |
| MRI system for neuroimaging typical and atypical cognitive and social development             | \$2,000,000 | Carnegie Mellon University             |  |
| Regulation of gene expression in the brain  | \$2,125,882 | National Institutes of Health (NIH)    |  |